



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,446	07/14/2005	Wilfried Krug	2002P20296WOUS	5112

7590 11/13/2007
Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

KAPLAN, HAL IRA

ART UNIT	PAPER NUMBER
----------	--------------

2836

MAIL DATE	DELIVERY MODE
-----------	---------------

11/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/542,446

Applicant(s)

KRUG, WILFRIED

Examiner

Hal I. Kaplan

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,8,10 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,8,10 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claim 23, objected to because of the following informalities: Claim 23, lines 4 and 5, "the further power supply component" lacks proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 7, 10, 13, 14, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US patent of Carcia (3,740,569) in view of the US patent of Baker et al. (5,555,151).

As to claim 7, Carcia discloses a communication system, comprising: a plurality of communications circuit modules (11-14) each operable at one or more of a plurality of voltages, the modules being compliant with maximum permissible voltage levels (+10V, +5V, -6V) defined for normal operation of the modules; and a plurality of power

supply components (26-28) for simultaneously supplying the circuit modules (11-14) with multiple voltage levels (+10V, +5V, -6V) (see column 2, lines 8-26 and 47-64; and Figure 1). Carcia does not disclose the claimed regulating circuit.

Baker discloses a regulating circuit connected to control output of power supply components (110, 112, 114; 118, 120, 122) with respect to a maximum permissible voltage level (magnitude) during operation, the regulating circuit configured to control voltage output from a first power supply component (110, 112, 114) so that deviation (magnitude) exceeding the maximum permissible voltage level is reduced or prevented (see column 3, lines 15-19; column 4, lines 49-66; column 5, lines 56-66; column 6, lines 11-26; and Figure 6). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the technique of Baker to regulate the power supply components of Carcia with respect to a maximum permissible voltage level during operation, in order to protect the communications circuit modules against excessive voltage.

As to claim 10, the maximum permissible voltage differential of Baker is a specified maximum voltage value (predetermined threshold) (see column 4, lines 60-66; column 5, lines 56-66; and column 6, lines 20-26).

As to claim 13, the first power supply component of Baker provides a power supply output having a maximum output voltage among all (both) of the power supply components (Baker does not specify which component is the first, which is the second, or which has the higher output voltage; however one of the power supply components

must have an output voltage greater than or equal to that of the other component and thus has the maximum output voltage of the two components).

As to claims 14 and 23, Carcia in view of Baker do not disclose the claimed further power supply component, but it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have constructed the power supply circuit of Baker with at least three power supply components and circuitry to reduce the voltage deviation between any two of them, because it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). See MPEP §2144.04(VI)(B).

As to claim 22, the regulating circuit of Baker (142,148,154,156,158) is connected between outputs of power supply components (110,112,114; 118,120,122) (see Figure 6).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carcia in view of Baker as applied to claim 7 above, and further in view of the US patent of Shima (7,085,584).

As to claim 8, Carcia in view of Baker disclose all of the claimed features, as set forth above, except for a USB, V.24, or Ethernet interface. Shima discloses a communication system (portable telephone) with a USB interface (see column 9, lines 50-60 and Figure 14). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a USB interface with the system of Carcia in view of Baker, in order to enable compatibility with a wide range of computer systems.

6. Claims 15, 16, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carcia in view of Baker, and further in view of the US patent of Latu et al. (6,757,386).

As to claim 15, Carcia in view of Baker disclose all of the claimed features, as set forth above, except for at least one communications circuit module compliant with the Safety Extra Low Voltage (SELV) standard. The regulating circuit of Baker (142,148,154,156,158) is connected between outputs of power supply components (110,112,114; 118,120,122) (see Figure 6). Latu discloses communications circuit modules (connected to circuit board portions 38) compliant with a maximum permissible voltage differential according to the SELV standard as defined in the IEC 60950 standard of the International Electrical Commission (IEC) (see column 5, lines 26-52). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Carcia to comply with the SELV standard, in order to have standards-compliant hardware.

As to claim 16, the circuit modules of Latu include communications interfaces (see column 4, lines 35-40 and column 5, lines 26-52). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the power supply circuit of Baker to supply power to a communication system such as the system of Latu, in order to prevent circulating currents which can result in damage to one or both of the power sources (see Baker, column 3, lines 1-7).

As to claim 18, the power supply circuit of Carcia includes a plurality of dc to dc converters (26-28) (see column 2, lines 47-64).

As to claim 21, one of the modules of Baker is a system module (aircraft utilization load) (see column 1, lines 26-35).

7. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carcia in view of Baker and Latu as applied to claim 15 above, and further in view of the US patent of Awata et al. (6,263,015).

As to claim 17, Carcia in view of Baker and Latu disclose all of the claimed features, as set forth above, except for the claimed analog subscriber line interface. Awata discloses an analog subscriber line interface (see column 4, lines 7-13 and column 6, lines 12-14). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the power supply circuit of Carcia in view of Baker and Latu to supply power to a communication system such as the system of Awata, in order to prevent circulating currents which can result in damage to one or both of the power sources (see Baker, column 3, lines 1-7).

As to claim 20, Awata discloses a subscriber module (23) (see column 7, lines 25-27 and Figure 6).

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carcia in view of Baker and Latu as applied to claim 16 above, and further in view of the US patent of Shima (7,085,584).

As to claim 19, Carcia in view of Baker and Latu disclose all of the claimed features, as set forth above, except for a USB interface. Shima discloses a communication system (portable telephone) with a USB interface (see column 9, lines 50-60 and Figure 14). It would have been obvious to one of ordinary skill in the art, at

the time of the invention, to have used a USB interface with the system of Carcia in view of Baker and Latu, in order to enable compatibility with a wide range of computer systems.

Response to Arguments

9. Applicant's arguments, see Remarks, filed August 29, 2007, with respect to the rejection(s) of claim(s) 7, 8, 10, and 13-23 under 35 U.S.C. 102(b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Carcia, Baker, Latu, and Shima.

10. Applicant's arguments filed August 29, 2007 have been fully considered but they are not persuasive.

As to Applicant's arguments that the Baker reference appears to address an entirely different problem from the claimed subject matter, because Baker relates to no-break power transfers between different power sources, and the claimed invention relates to controlling voltage levels during simultaneous provision of multiple voltage levels in a communication system, in order to read on the claimed subject matter, the prior art must disclose only the structural features of the claimed invention. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See MPEP §2114.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

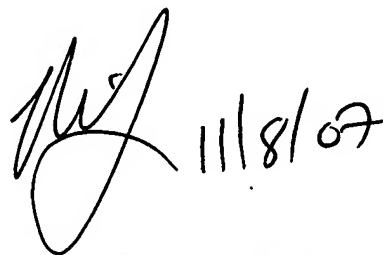
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/542,446
Art Unit: 2836

Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

hik

A handwritten signature in black ink, followed by the date "11/8/07".

MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800